

List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 10 (Cancelled).

11. (Currently Amended) A flowmeter having:

at least two ultrasonic transducers, which are clamped on a containment, through which a medium is flowing in a stream direction, wherein the ultrasonic transducers alternately send and receive ultrasonic measuring signals in, and against, the stream direction; and

a control/evaluation unit, which, on the basis of the travel time difference of the ultrasonic measuring signals propagating in, and against, the stream direction, determines and/or monitors the volume flow rate of medium in the containment, wherein:

said at least two ultrasonic transducers are constructed such that they send and receive ultrasonic measuring signals, or sonic fields, with a large beam spread,

a minimum separation of said at least two ultrasonic transducers and the beam spread of the ultrasonic measuring signals, or sonic fields, is dimensional such that the ultrasonic measuring signals propagate along at least two sonic paths, which differ in the number of traverses, wherein a traverse defines the section of a sonic path, along which an ultrasonic measuring signal crosses once through the containment are arranged in a defined separation from one another, the separation of said at least two ultrasonic transducers being dependent only on the opening angle (γ) of ultrasonic measuring signals, or the sonic fields; and

said control/evaluation unit, on the basis of the travel time of the ultrasonic measuring signals, which propagate along at least two different sonic paths in and against the stream direction in the containment through which the medium

is flowing, calculates at least one of the system- or process parameters necessary for determining the volume flow rate of the medium in containment.

~~the separation (L) of said at least two ultrasonic transducers is independent of other system- and/or process-parameters (w, cr, c, di).~~

Claims 12 - 15 (Cancelled).

16. (Currently Amended) The flowmeter as claimed in claim [[15]] 11, wherein:

the at least one system- or process parameter is the inner diameter of the containment, the wall thickness of the containment, the velocity of sound in the material of which the containment is fabricated, or the velocity of sound in the medium.

17. (Previously presented) The flowmeter as claimed in claim 11, wherein:

each of said at least two ultrasonic transducer has at least one piezoelectric element as a sending- and/or receiving element.

Claims 18 - 20 (Cancelled).

21. (New) The flowmeter as claimed in claim 11, wherein:

the flowmeter is a clamp-on flowmeter which is mounted on the outer surface of the containment